

PROCESS OF REMOVING A CERAMIC COATING DEPOSIT IN A SURFACE HOLE OF A COMPONENT

ABSTRACT

A process of removing ceramic deposits (22) from a surface hole (12) in a component (10), a particular example being portions of a ceramic coating (20) deposited on a surface (16) of a component (10) equipped with cooling holes (12). The process makes use of a pulsed Nd:YAG laser operated with parameters that avoid delamination, cracking or otherwise damaging a ceramic coating (20) surrounding a cooling hole (12). The laser is operated to generate a laser beam (24) that removes some of the ceramic deposit (22) from the hole (12) while a residual portion of the ceramic deposit (22) remains surrounding the hole (12) to define a surface opening.

Fig. 1